DOCUMENT RESUME

ED 301 098 HE 021 932

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TITLE Self-Concept as a Moderator of Congruence between Vocational Interests and Academic Major in College Juniors and Seniors.
PUB DATE Apr 88
NOTE 10p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 5-9, 1988).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; College Seniors; *College Students; Higher Education; *Majors (Students); Personality Traits; *Self Concept; Self Esteem; Student Characteristics; *Vocational Interests
IDENTIFIERS College Juniors; Strong Campbell Interest Inventory; Wallace Self Concept Scale

ABSTRACT

A study was conducted to investigate congruency between college students' vocational interests and their chosen academic major as an implementation of their self-concept. Of the 248 randomly selected college juniors and seniors who received the study instruments the response rate was 76% (188 responses). The instruments used were the Strong Campbell Interest Inventory (SCII) and the Wallace Self Concept Scale (WSCS). The dependent variable was congruence between a student's college major and the personality type or profile on the General Occupational Theme subscales of the SCII. Results confirmed the hypothesis that students with high self-concepts tended to have high congruence between the vocational interest profile and selection of a major. Conversely, students with low self-concepts tended to have low congruence between vocational interest profiles and selection of a major. These relationships were not moderated by gender or ethnic origin. Implications of the results for career counseling are discussed. Contains 11 references. (KM)

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Self-Concept as a Moderator of Congruence Between Vocational Interests and Academic Major in College Juniors and Seniors

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A Paper Presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana, April, 1988

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Self-Concept and Degree of Congruence Between Vocational Interests and Academic Major in College Students

The purpose of this research was to investigate congruency between college student's vocational interests and their chosen academic major as an implementation of their self-concept. Selection of a college major has been found to be an active form of commitment to a vocational preference (Holland 1966 ,1973, 1985; Apostal & Harper, 1972; Walsh, 1973). In addition, the vocational preference of college students may be associated with their self-concepts and personality (Walsh, 1973). These writers hypothesize that college students highest in congruence between college major and personality type tend to have the highest level of achievement, satisfaction and stability.

Theory

The general theory for this research is based upon the work of Holland (1966, 1973, 1985) who believes that different personality types have different interests, competencies, and dispositions toward the work environment. He proposes that most persons can be categorized into one of six personality dimensions: realistic, investigative, artistic, social, enterprising and conventional. These persons tend to seek out environmental work conditions which match their personality type and which allow them to express their attitudes, values, skills, and abilities. A related, but specific aspect of this general theory, is proposed by Korman (1970). He hypothesizes that the consistency of the relationship between self-concept and occupational choice is moderated by the level of self-concept. That is, persons high in self-esteem would demonstrate congruence between personal characteristics and occupational choice

while low self-esteem individuals would demonstrate incongruence (Korman, 1976). (Korman uses the term "self-esteem" rather than self-concept. The authors are aware that there may be differences in meaning between the two constructs, however, for the purposes of this research the two terms are used interchangeably.) The research reported here was based upon Korman's (1976) theoretical position which served as a guide for the study. The general research question was:

> Does self-concept act to moderate the congruence between the vocational interest profile and the selection of an academic major for junior and senior college students who are classified by gender and ethnic origin?

Method

The population for this study was 248 students randomly selected from the Junior and Senior classes in a large metropolitan university. There were 188 participants who returned the research instruments in usable form, which represents a return rate of 76 percent.

The two instruments used in this study were the Strong Campbell Interest Inventory (SCII) (Campbell & Hansen, 1984) and the Wallace Self-concept Scale (WSCS) (Wallace, et al., 1984). Both scales have shown adequate reliability and validity and can be used with some confidence.

The dependent variable used in this study was congruence between a student's college academic major and the personality type or profile on the General Occupational Theme (GOT) subscales of the SCII. This is operationally defined as a score (which ranges from 0 to 10) on the revised Zener-Schnuelle Index as modified by Robbins, Thomas, Harvey & Kandefer (1978). The index score is the degree of agreement between the student's GOT summary codes and their declared

academic major. For example, when the Holland three-letter codes assigned to the current academic major and the GOT subscale three-letter codes are the same, there is a match between the chosen academic major and personality type and the student receives an index score of 10. When there is no match between the academic major and GOT three-letter Holland codes the student receives an index score of zero.

The independent variables were self-concept, gender and ethnic origin. The self-concept variable was a students total score on the WSCS. The WSCS scores were then divided at the mean and placed into two groups labeled as high and low self-concept. Gender was categorized into two groups male and female. Ethnic origin was classified into Black and White categories.

The statistical procedure used to analyze the data was a two way analysis of variance. The 2 X 2 ANOVA was chosen to minimumize Type I error and to determine if any significant results might be due to interaction between the classification variables and the dependent variable. If there were significant main effect differences then a post hoc t test for independent samples was used to determine between which groups the differences occurred. Results

The table of variance results for differences between gender and self-concept on congruence scores are presented in Table 2. Inspection of the table shows that there was a main effect (F = 4.088, p .045) due to the self-concept categories. There was no main effect for gender and no interaction effect of gender and self-concept on the dependent variable. A post hoc t test (t = 1.85, p = .05) indicated that the main effect difference on congruence scores was between high and low self-concept female students. These mean

score differences can be observed by inspecting the descriptive statistics in Table 1.

The table of variance results for differences between ethnic origin and self-concept on the congruence scores are presented in Table 4. Inspection of the table shows that there was a main effect (F = 7.209, p = .008) due to the self-concept categories. There was no main effect due to ethnic origin nor interaction effect of ethnic origin and self-concept on the dependent variable. A post hoc t test (t = 2.40, p = .025) indicated that the main effect difference for congruence scores was between high and low self-concept Black students. These mean score differences can be seen by inspecting the descriptive statistics in Table 3.

The analysis of data confirmed the research hypotheses that college students with high self-concepts tended to have high congruence (or match) between vocational interest profile and selection of an academic major. Conversely, college students with low self-concepts tended to have low congruence (or mismatch) between vocational interest profiles and selection of an academic major. Further, this relationship between self-concept and congruence was not moderated by the variables of gender and ethnic origin.

These results are important from both a theoretical and a practical point of view. From the theoretical point of view they support Korman's (1976) propositions that persons which are high in self-esteem are more likely to demonstrate congruence between personal characteristics and occupational choice than do persons who are low in self-esteem. From a practical point of view the results may be applied to several aspects of academic advising. It seems

important to provide procedures for encouraging students to complete a battery of vocational inventories early in the college experience, including appropriate personality inventories. This is important in that Holland (1966), Super (1951), Korman (1976) and others suggest that persons search for environments and vocations that permit them to satisfy and express their personalities. Holland (1966), in particular, suggests that the selection of a college major is a form of commitment to a vocation and that students tend to sort themselves into fields (majors) which are congruent with their interests and personalities. It would seem particularly important that low self-esteem students would be "red flagged" for particular attention as they choose and pursue an academic major. If more attention were given to the broader concept of "career counseling", including the idea that selecting a major is a form of commitment to a vocation, then more college graduates might report a higher degree of satisfaction with their post graduation work environment.

Table 1: 2 X 2 ANOVA Basic Statistics (By Cell) for Congruence by Gender and Self-concept

	Gender: Male	Gender: Female
Low SC	N = 34 Mean = 5.53 S.D. = 2.26	N = 48 Mean = 5.87 S.D. = 2.08
High SC	N = 41 Mean = 6.12 S.D. = 2.12	N = 65 Mean = 6.59 S.D. = 2.15

High/Low SC Female Students: $\pm$ (2,111 df) = 1.85
alpha = .05

Table 2: 2 X 2 ANOVA Table of Variance for Congruence by Gender and Self-concept

Source	ss	df	F	p
Self-Concept	18.836	1	4.088	.045
Gender	7.257	1	1.575	.211
Interaction	.152	1	.033	.856
Error	847.895	184		

Table 3: 2 X 2 ANOVA Basic Statistics (By Cell) for Congruence by Ethnic Origin and Self-concept

	Ethnic Origin: Black	Ethnic Origin: White
Low SC	N = 11 Mean = 4.82 S.D. = 2.40	N = 71 Mean = 5.87 S.D. = 2.40
High SC	N = 20 Mean = 6.70 S.D. = 1.78	N = 86 Mean = 6.30 S.D. = 2.24

High/Low SC Black Students: $\underline{t}$ (2,29 df) = 2.40
alpha = .025

Table 4: 2 X 2 ANOVA Table of Variance for Congruence by Ethnic Origin and Self-concept

Source	ss	df	F	p
Self-Concept	33.025	1	7.209	.008
Ethnic	2.876	1	.628	.429
Interaction	12.065	1	2.634	.106
Error	842.916	184		

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